

WHAT IS CLAIMED IS:

1. A lead-acid battery comprising an anode, a cathode and an electrolytic solution, wherein into the anode is added a carbon containing a simple substance and/or a compound, both having a catalysis for desulfurization or  $\text{SO}_x$  oxidation.
2. A lead-acid battery according to Claim 1, wherein the simple substance and/or the compound is at least one major component constituting catalysts for desulfurization or deodorization selected from catalysts for petroleum refining, catalysts for fuel oil desulfurization, catalysts for gas production and catalysts for pollution control.
3. A lead-acid battery according to Claim 2, wherein the component is at least one simple substance selected from the group consisting of Co, Mo, Ni, Zn, Cu and Mn, or at least one oxide, sulfate or hydroxide thereof.
4. A lead-acid battery according to Claim 1, wherein the simple substance and/or the compound is at least one major component constituting catalysts for sulfuric acid production.
5. A lead-acid battery according to Claim 4, wherein the component is at least one simple substance selected from the group consisting of alkali metals, alkaline earth metals, V, Mn and rare earth elements, or at least one oxide or sulfate thereof.
6. A lead-acid battery comprising an anode, a

cathode and an electrolytic solution, wherein into the anode is added a loaded material obtained by loading, on a carbon, at least one simple substance selected from the group consisting of Hf, Nb, Ta, W, Ag, Zn, Ni, Co, Mo, Cu, V, Mn, Ba, K, Cs, Rb, Sr and Na, or at least one oxide, sulfate, hydroxide or carbide thereof.

7. A lead-acid battery according to Claim 6, wherein the loaded material is obtained by loading, on a carbon, at least one simple substance selected from the group consisting of Ni, Co, Mo, Cu, V, Mn, Ba, K, Cs, Rb, Sr and Na, or at least one oxide, sulfate, hydroxide or carbide thereof.

8. A lead-acid battery according to Claim 6, wherein the at least one element is loaded on the carbon in an amount of 10 to 5,000 ppm by weight per element.

9. A lead-acid battery according to Claim 6, wherein the at least one element is loaded on the carbon in an amount of 50 to 1,000 ppm by weight per element.

10. A lead-acid battery according to Claim 6, wherein the simple substance, oxide, sulfate, hydroxide or carbide has an average primary particle diameter of 0.1 to 1,000 nm.

11. A lead-acid battery according to Claim 1, wherein the carbon is at least one member selected from the group consisting of carbon black, acetylene black, natural graphite, artificial graphite, pyrolytic

carbon, coke, isotropic graphite, mesophase carbon, pitch-based carbon fiber, carbon fiber by vapor phase growth, carbon fluoride, nanocarbon, active carbon, active carbon fiber and PAN-based carbon fiber.

12. A lead-acid battery according to Claim 6, wherein the carbon is at least one member selected from the group consisting of carbon black, acetylene black, natural graphite, artificial graphite, pyrolytic carbon, coke, isotropic graphite, mesophase carbon, pitch-based carbon fiber, carbon fiber by vapor phase growth, carbon fluoride, nanocarbon, active carbon, active carbon fiber and PAN-based carbon fiber.

13. A lead-acid battery comprising a cathode, an anode and an electrolytic solution, wherein into the anode is added an active carbon or a carbon black or a mixture thereof containing at least one simple substance selected from the group consisting of Cu, Ni, Zn, Mn, Al, Si, K and Mg, or at least one compound thereof.

14. A lead-acid battery according to Claim 13, wherein the active carbon is an active carbon produced from coconut husk, having a Cu content of more than 5 ppm by weight but less than 15,000 ppm by weight.

15. A lead-acid battery according to Claim 13, wherein the carbon black is a furnace black having a total content of Ni, Cu, Zn and Mn more than 1 ppm by weight but less than 1000 ppm by weight.

16. A carbon material for use in a lead-acid

battery, which is a carbon powder containing or loading thereon at least one simple substance selected from the group consisting of Hf, Nb, Ta, W, Ag, Zn, Ni, Co, Mo, Cu, V, Mn, Ba, K, Cs, Rb, Sr and Na, or at least one oxide, sulfate, hydroxide or carbide thereof.

17. A carbon material for use in a lead-acid battery, which is a carbon powder containing a simple substance and/or a compound, both having a catalysis for desulfurization or  $\text{SO}_x$  oxidation.

18. A carbon material for use in a lead-acid battery, which is an active carbon and/or carbon black containing at least one simple substance selected from the group consisting of Cu, Ni, Zn, Mn, Al, Si, K and Mg, or at least one compound thereof.